

REMOTE PARTICLE COUNTER FOR REMOTE MEASUREMENT
OF THE NUMBER AND SIZE DISTRIBUTION
OF SUSPENDED FINE PARTICLES IN THE ATMOSPHERE

ABSTRACT OF THE DISCLOSURE

5 A remote particle counter comprising a pulsed laser
generator, laser light emitting optics, scattered light
collecting optics, a high-sensitivity two-dimensional photo
detector as a scattered light detecting portion having a
fast gating capability such as a CCD camera, and a control
10 and measure system, wherein suspended fine particles
forming aerosols in the atmosphere which are far away from
the site of laser emission are illuminated with laser
light, the resulting backward scattered light from the
individual fine particles is detected as image, and the
15 number and size distribution of the suspended fine
particles are measured at a remote site.